

Transitions in agricultural landscapes of Japan

Iwate University
Koji Harashina

Self-introduction



Koji Harashina
Associate Prof.,
Faculty of Agriculture, Iwate University

With my colleagues
at BOKU (3/7/2018)

2003.3 PhD at the University of Tokyo

2003.4– PD researcher at UT

2004.4–10 Okayama Univ.(JSPS PD fellow)

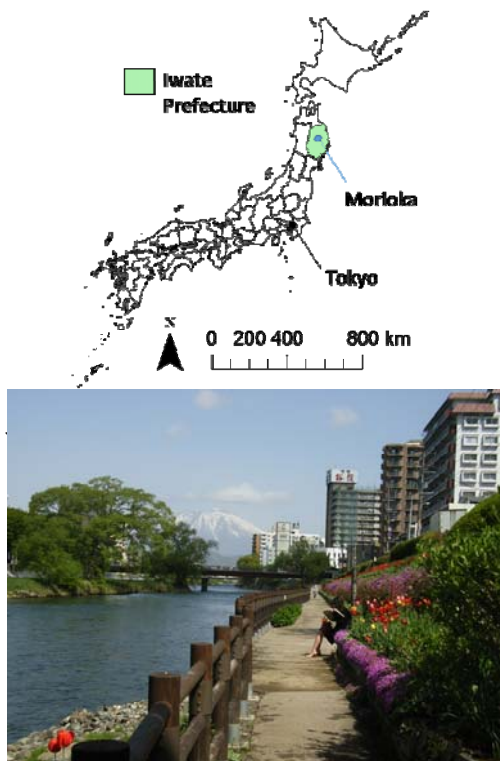
2004.11– Iwate University (Lecturer, Associate Professor)

2018.6–11 Visiting researcher at BOKU, Vienna

Research field: **(Sabbatical leave)**

Landscape ecology and resource management

Where is Iwate?



Iwate University



My laboratory:

Lab. Landscape Ecology & Management
(地域生態管理学研究室)



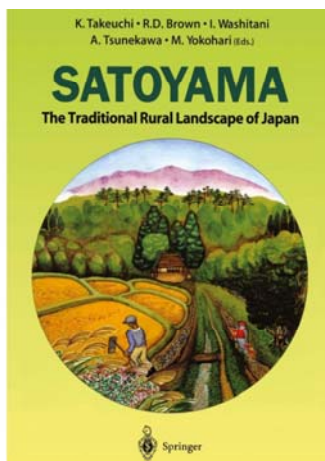
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SATOYAMA

– Traditional Japanese rural landscape –



SATOYAMA:
Combination of
forest/coppice/grassland,
agricultural land, and settlement.

Sato: settlement/village

Yama: mountain

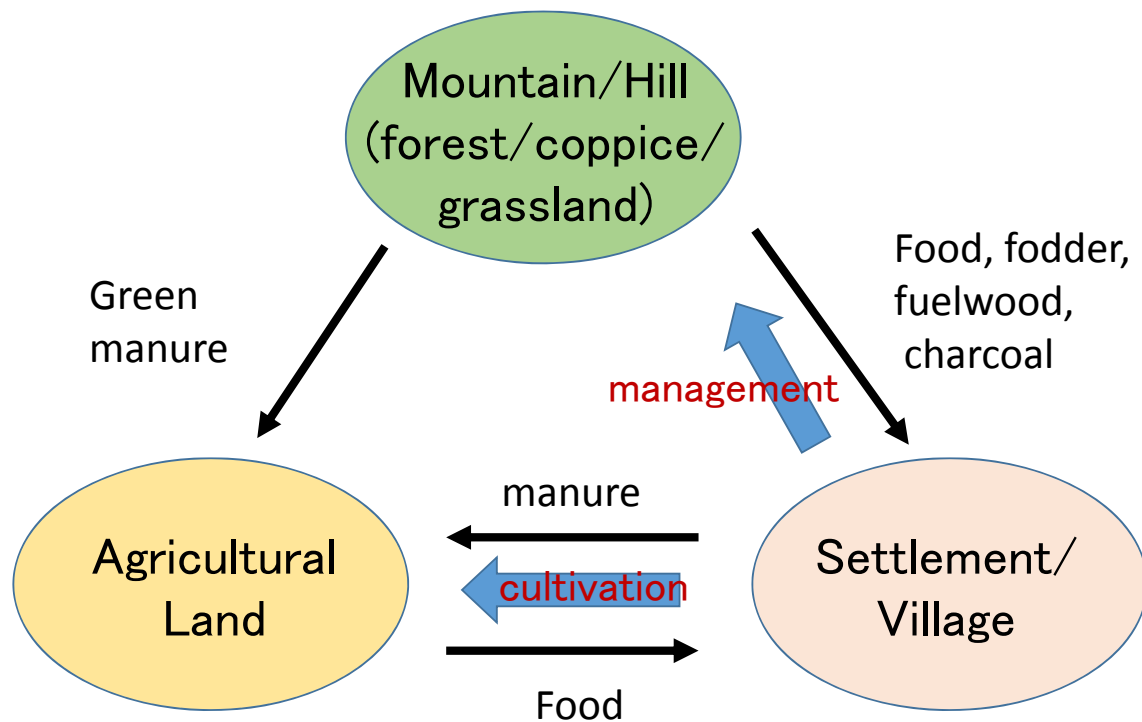
(forest/coppice/grassland)







Resource use in SATOYAMA



SATOYAMA landscape is maintained by human intervention through management for resource use



↑刈り取った柴は山裾で乾かし天秤棒で担ぎ持ち帰った
 ●昭和30年代 石川県能登半島
 撮影・榎池信行 (須藤功著『写真ものがたり昭和の暮らし9技と知恵』農文協より転載)



↑薪柴を採取し萌芽更新で雑木を再生させた
 ●昭和46年 新潟県山古志村 (現 長岡市)
 撮影・須藤功 (須藤功著『写真ものがたり昭和の暮らし9技と知恵』農文協より転載)

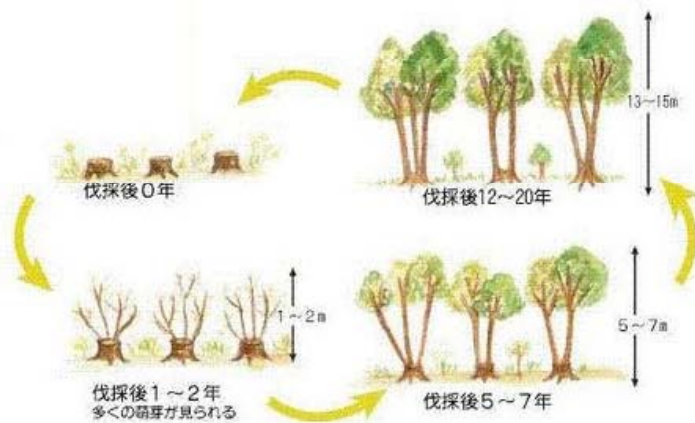


↑家畜の飼料や刈藪、屋根を葺くカヤを採取する草地 (入会地)
 ●昭和34年 長野県富士見町
 撮影・武藤益 (須藤功著『写真ものがたり昭和の暮らし1農村』農文協より転載)



↑刈草を野積みで乾かし牛の背に乗せ持ち帰る
 ●昭和40年 熊本県南小国町
 撮影・白石巖 (須藤功著『写真ものがたり昭和の暮らし2山村』農文協より転載)

Coppicing in Satoyama



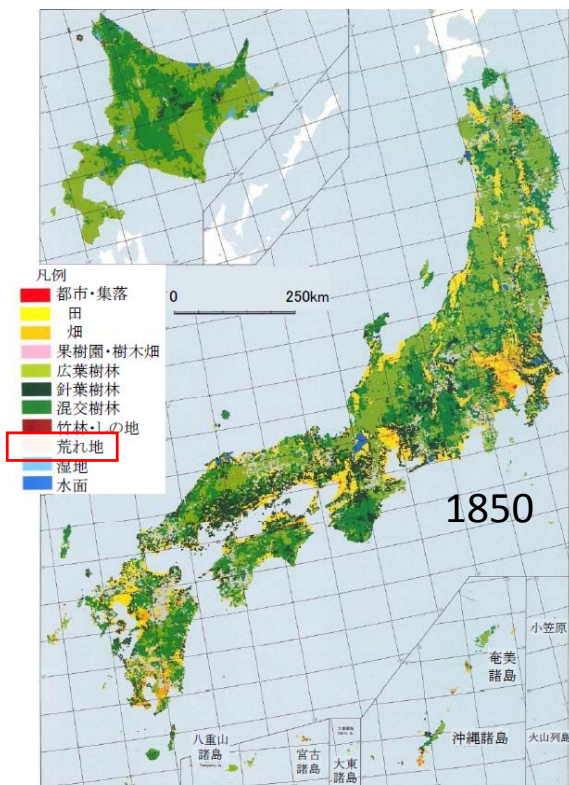
<http://www.city.hachioji.tokyo.jp/shisetsu/109/p011909.html>

Mixture of different successional stage of coppice increase the diversity of landscape

Forest thinning

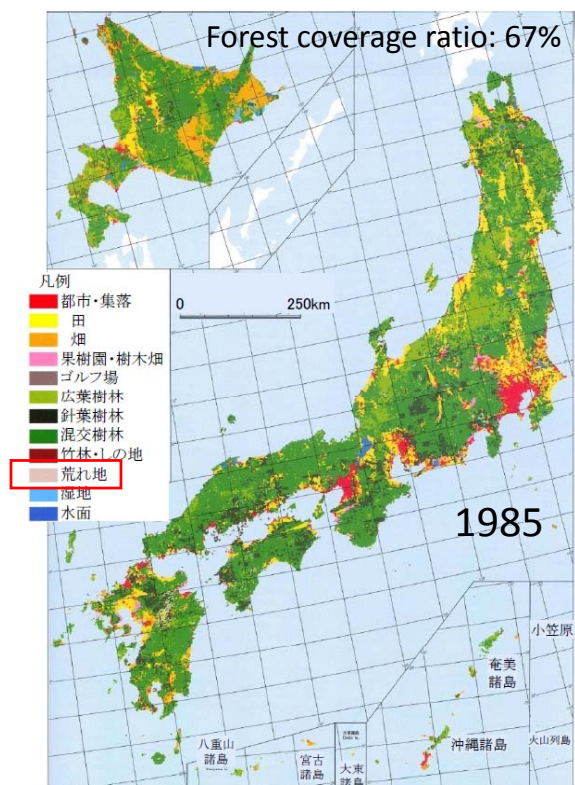


Land use/cover change from 1850 to 1985



①1850年頃(近世末)の国土利用

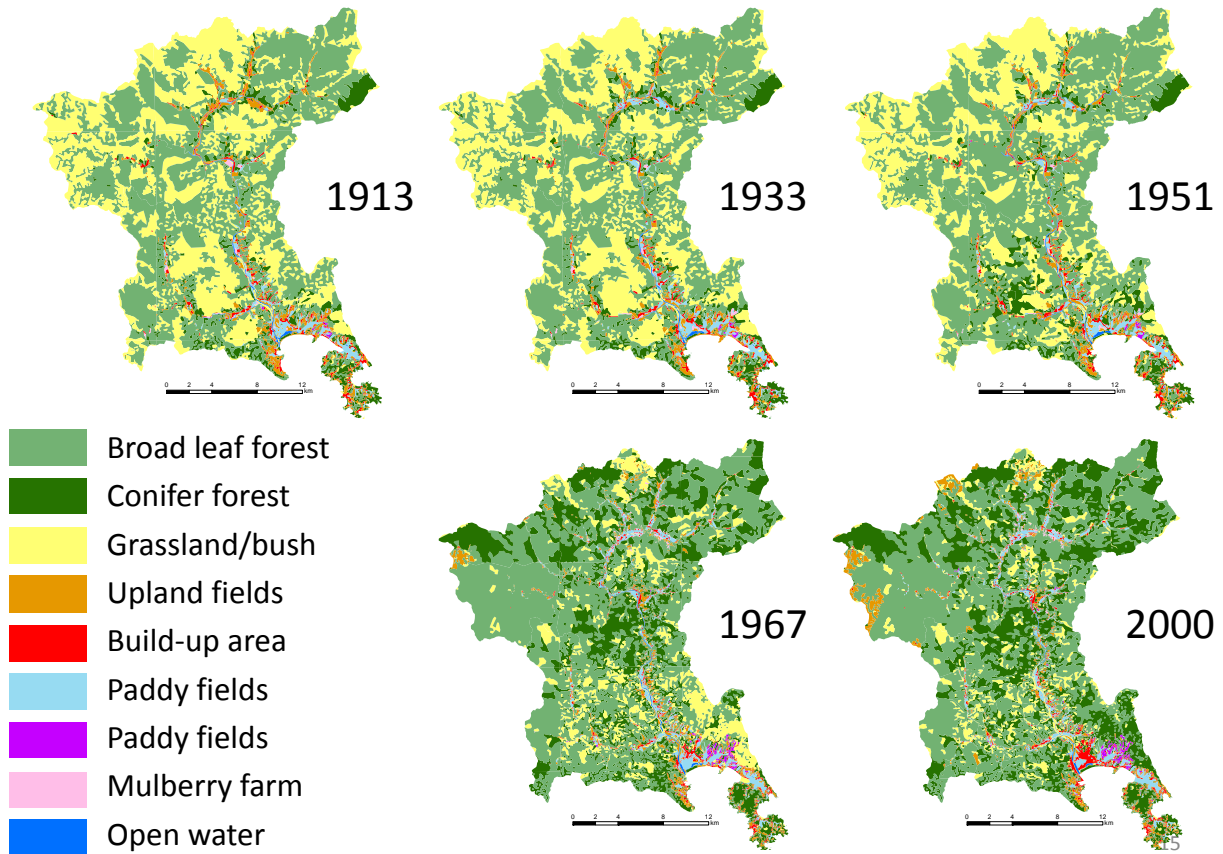
作成:有菌正一郎



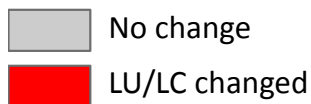
④1985年頃(昭和末期)の国土利用

作成:米見山幸夫

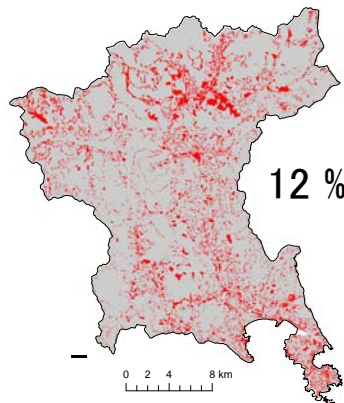
Land use/cover change in Kesen-region, Iwate



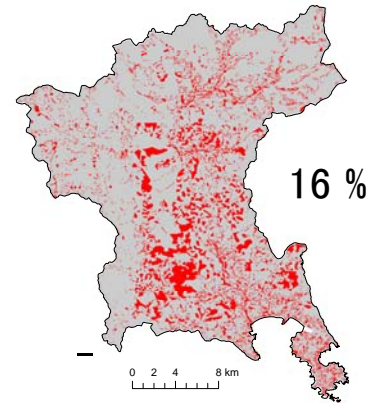
Percentage of area where land use/cover changed (%)



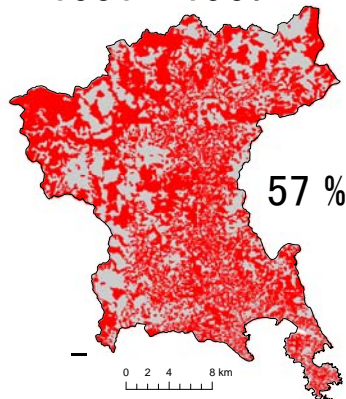
1913⇒1933



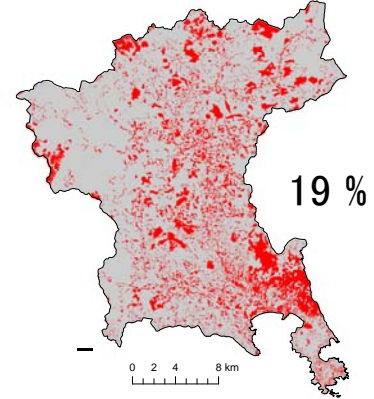
1933⇒1951



1951⇒1967



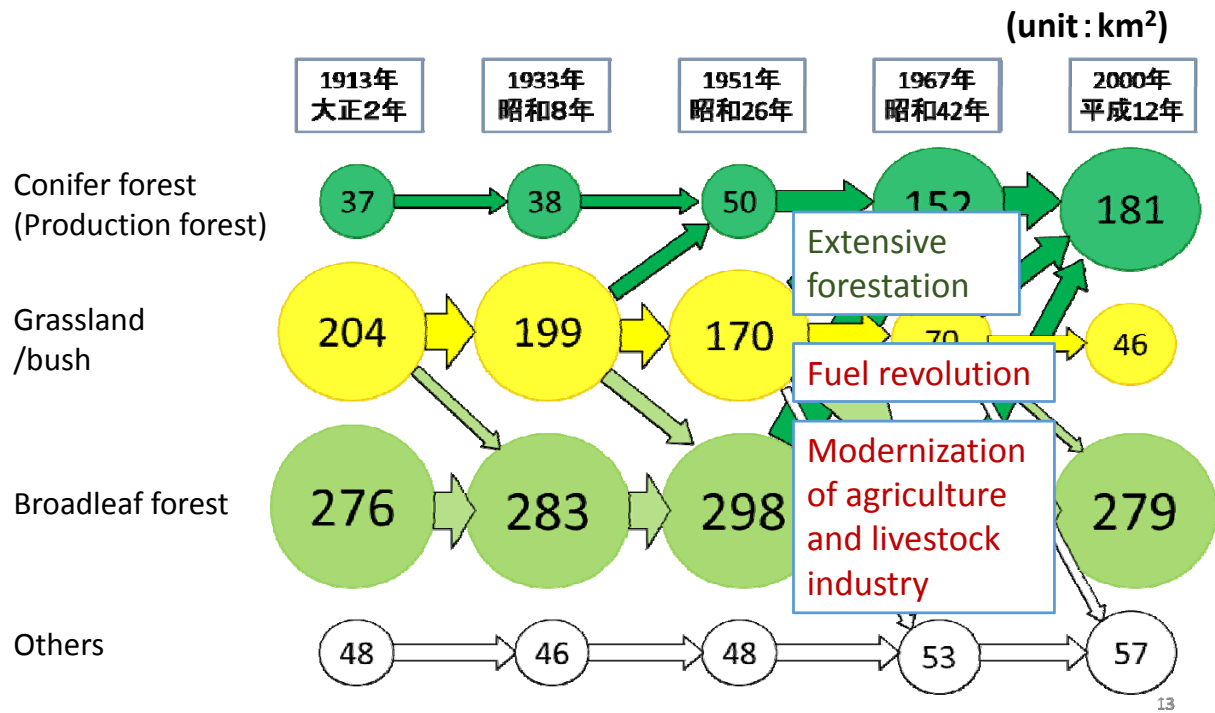
1967⇒2000



Dramatically changed from 1951 to 1967 (Postwar rebuilding ~ high economic growth period)

What is in the background?

Land use/cover change in Kesen-region, Iwate



Fuefuki pasture in Iwate



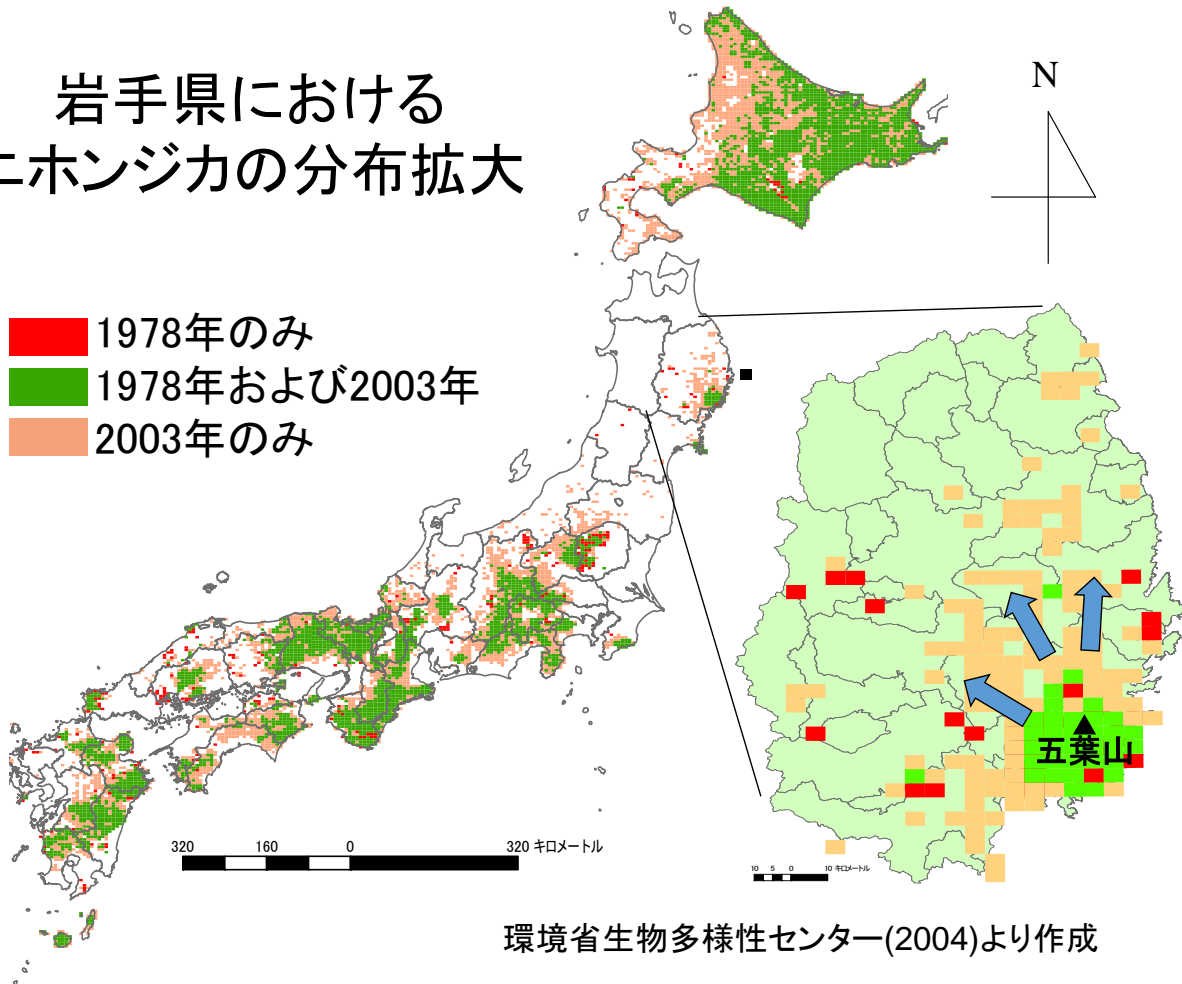
Abandoned in about 10 years ago..., but?

Sika deer farm?



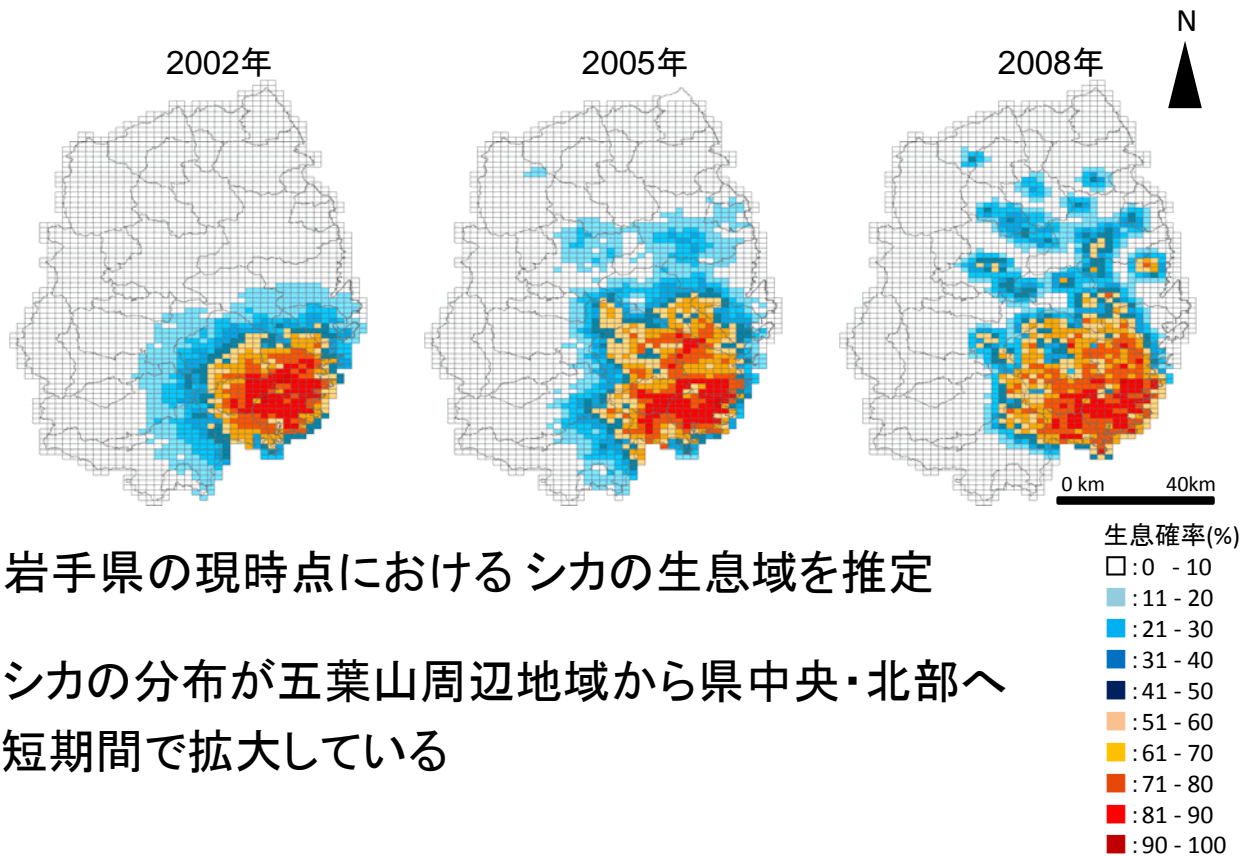
岩手県における ニホンジカの分布拡大

- 1978年のみ
- 1978年および2003年
- 2003年のみ



環境省生物多様性センター(2004)より作成

岩手県におけるニホンジカの生息域推定モデル



- ・岩手県の現時点におけるシカの生息域を推定
- ・シカの分布が五葉山周辺地域から県中央・北部へ短期間で拡大している

Conclusion

Japanese traditional landscape “SATOYAMA” has been maintained by management for resource use

Landscape is closely related to economic value of land use in the context of social background

SATOYAMA is now reevaluated in the context of cultural and biodiversity conservation

Japan experienced dramatic landscape change during 1950–1960s which is postwar rebuilding and high economic growth period

Recently, wildlife has become one of the driving force for landscape change